

### ABSTRACT OF THE DISCLOSURE

An apparatus for providing an indication of relative movement between sheave assemblies of a riser tensioner that has a sensor target connectable to one of the sheave assemblies, a sensor tube cooperative with said sensor target and suitable for interconnection to the other of the sheave assemblies, a metallic member positioned within the sensor tube and suspended by the sensor target, and an ultrasonic sensor cooperative with the sensor tube so as to sense a distance that the metallic member moves within the sensor tube in relation to relative movement between the sensor target and the sensor tube.